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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,890	10/17/2003	Thomas Baumgartner	5689-280	9799

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EXAMINER
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PIERCE, JEREMY R

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

4

<b>Office Action Summary</b>	<b>Application No.</b> 10/687,890	<b>Applicant(s)</b> BAUMGARTNER ET AL.	
	<b>Examiner</b> Jeremy R. Pierce	<b>Art Unit</b> 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.  
     4a) Of the above claim(s) 19-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 37-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed on January 20, 2006 has been entered. Claims 37-41 have been added. Claim 1 has been amended. Claims 1-41 are currently pending with claims 19-36 withdrawn from consideration.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 8, 9, and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Diehl (U.S. Patent No. 4,187,618).

Diehl discloses a felt comprising a set of fine top machine direction yarns and coarser bottom machine direction yarns interwoven with fine cross machine direction yarn in a plurality of repeat units (Abstract and Figure 5). A nonwoven batting overlays the top machine direction yarns (Abstract and Figure 5). Each of the cross-machine direction yarns (20) interweaves with both top and bottom machine direction yarns (13, 15). With regard to claim 2, the bottom MD yarn may be multifilament yarn (column 4, lines 17-21) and can be twisted (column 3, line 18). With regard to claim 3, the bottom MD yarn may have a denier of 840 (column 4, line 20). With regard to claim 8, the ratio of top MD yarns to bottom MD yarns may be 2:1 (column 3, lines 35-36). With regard to claim 9, Diehl teaches that the batting may extend through the base fabric to the other

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side (column 4, lines 2-3). With regard to claim 14, Diehl teaches a duplex weave may be used (column 3, line 16). With regard to claim 15, one can define Figure 5 of Diehl as a repeating unit. There are two knuckles present from the CMD yarn. With regard to claim 16, one bottom MD yarn separates the two knuckles. With regard to claim 17, two knuckles from the CMD yarn are also formed over the top MD yarn. With regard to claim 18, one could define a repeating unit to comprise multiple two-knuckle floats over the top MD yarns.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-7, 9-13 and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diehl in view of Gstrein et al. (U.S. Patent No. 6,175,996).

With regard to claims 4-7, Diehl discloses the base fabric can have various types of yarn (column 3, lines 17-18), but fail to teach using monofilament yarns or yarns within the claimed diameter range. Gstrein et al. teach a felt comprising a base fabric having a batt needled into it (Abstract). Gstrein et al. disclose the base fabric may comprise two sets of MD yarns interwoven with a CMD yarn (column 4, lines 36-39). Gstrein et al. teach that weave pattern and yarn sizes and configurations are selected for the desired performance of the fabric (column 1, lines 42-47). Gstrein et al. teach that a suitable base fabric for the purposes of needling the batt has MD and CMD yarns

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that are monofilament with a diameter up to 0.3 mm (column 3, lines 5-10). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use monofilament MD and CMD yarns with a diameter up to 0.3 mm in the felt of Diehl in order to create a fabric that is well suited for being needled with a batting, as taught by Gstrein.

With regard to claim 9, Diehl teaches that the batting may extend through the base fabric to the other side (column 4, lines 2-3). Gstrein teaches that it may be desirable to fully form a second batting layer on the other side of the base fabric (claim 12). It would have been obvious to a person having ordinary skill in the art at the time of the invention to further form a batt layer on the bottom side of the fabric of Diehl in order to use the felt in additional applications, as taught by Gstrein.

With regard to claims 10-13 and 37-40, Diehl does not disclose using a triplex fabric. Gstrein et al. teach that duplex and triplex fabrics are both known in the felt art and are equally useful (column 4, lines 24-29). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a triplex construction in the fabric of Diehl as taught by Gstrein et al., since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

6. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diehl in view of Smart (U.S. Patent No. 4,503,113).

Diehl explicitly teaches that the illustrations show there is one coarse strand for every two fine strands (column 3, lines 35-36). However, Diehl does not disclose

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having a ratio of fine strands to coarse strands of between 3:1 and 5:1. Smart also teaches a papermaker's felt comprising a woven base structure combined with a nonwoven batting (Abstract and Figure 1). Smart discloses that the ratio of yarns between a fine upper layer and a coarse middle layer may be between 2:1 and 4:1 (column 2, lines 47-49). Smart teaches that finer yarn in the upper layer allows for adequate distribution of pressure to the upper batt layer (column 2, lines 39-42). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a ratio of fine strands to coarse strands of up to 4:1 in the belt of Diehl in order to allow for a higher distribution of pressure to the upper batt layer, as taught by Smart.

### ***Response to Arguments***

7. Applicant's arguments filed January 20, 2006 have been fully considered but they are not persuasive.

8. Applicant argues that claim 1 now requires "each of the fine cross machine direction yarns interweaves with both top and bottom machine direction yarns."

Applicant asserts that some of the CMD yarns of Diehl (names, CMD yarns 14) interweave with only the top MD yarns 13. However, Applicant's claims do not require that all CMD yarns must interweave with top and bottom MD yarns. Applicant's claims only require "a set of fine cross machine direction yarns" wherein each of the fine CMD yarns *in that set* interweaves with both top and bottom machine direction yarns. The CMD yarns (20) taught by Diehl meets this limitation because they comprise a set of CMD yarns that interweave with both kinds of MD yarns. Applicant's claims do not

preclude the presence of another set of CMD yarns, which may or may not interweave with both sets of MD yarns. Applicant's claims use the "comprising" transitional phrase. The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. MPEP 2111.03 [R-3].

9. Applicant points out that the binders 20 of Diehl are spaced apart from each other. However, the binders 20 of Diehl still meet the claim limitations because they are interwoven with both top and bottom MD yarns.

10. Applicant argues that the present invention is directed to fiber cement felt whereas Diehl is directed to papermaking felt. However, the recitation "fiber cement felt" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Although Applicant points out differences between papermaking felts and fiber cement felts, none of these differences are represented structurally in the claims.

11. Applicant argues that Gstrein is directed to papermaking felts also. However, this argument only reinforces the combination of this reference with Diehl as valid. It is additionally noted that nearly all of the references cited in Applicant's Information

Disclosure Statement dated January 14, 2004 relate to papermaking felts. Thus, it is assumed that papermaking felts comprise pertinent prior art in relation to the present invention.

12. Applicant argues that Gstrein briefly mentions triplex designs, but fails to mention the benefits of using such a design. However, Gstrein recognizes that triplex fabrics are generally equivalent to single layer and duplex fabrics in the art of making felts (column 4, lines 24-29). Express suggestion to substitute one equivalent for another need not be present to render such substitution obvious. *In re Fout*, 213 USPQ 532 (CCPA 1982).

13. Applicant's argument pertaining to the ratio of top to bottom MD yarns is moot in light of the new grounds of rejection set forth above.

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of




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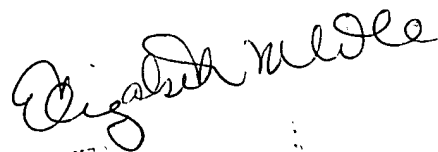
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on normal business hours, but works flextime hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeremy R. Pierce  
March 27, 2006

  
Elizabeth M. Dele  
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Patent